# BRUHAT BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE

## BYATARAYANAPURA DIVISION

## BYATARAYANAPURA SUB DIVISOIN

**Name of the Work** : **Maintenance of water supply Existing borewells at Thanisandra Surrounding area in Ward No. 06 Byatarayanapura Sub Division**

**Estimated Cost : 25.00 Lakhs**

# BRUHAT BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE

**Estimate Cost Rs. 2500000.00**

**Name of Work:** Estimate for Maintenance of water supply Existing borewells at Thanisandra Surrounding area in Ward No. 06 Byatarayanapura Sub Division

| Sl No | Description of item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | **A) Rewinding** | | | | | | | | |
| 1 | Labour Charges of lifting of non functioning submersible Pump set along with cable and GI Pipes (BWSSB SR 14-15, P-558 I-1(i) | Each Length | 2X60 | 40.00 | | | **4800** | 109.00 | **523200.00** |
| 2 | Transportation of pumping machineries (**P. 56 / I. 10.3.19) PRED SR (2012-13)** | Each | 60 | | | | **60** | 900.00 | **54000.00** |
| 3 | Rewinding of Submersible Pump Sets | | | | | | | | |
| 4 | (BWSSB SR 14-15 P-58 I-A) 10 HP | No. | 12 | | | | **12** | 4785.00 | **57420.00** |
| 5 | (BWSSB SR 14-15 P-58 I-A) 7.5 HP | No. | 8 | | | | **8** | 3822.00 | **30576.00** |
| 6 | (BWSSB SR 14-15 P-58 I-A) 12.5 HP | No. | 15 | | | | **15** | 5885.00 | **88275.00** |
| 7 | (BWSSB SR 14-15 P-58 I-A)15.0HP and above | No. | 25 | | | | **25** | 5800.00 | **145000.00** |
| 8 | **B) Replacement of Motor Parts:** | | | | | | | | |
| 9 | Pump Bowls (BWSSB SR 14-15 P-58 I-B) | No. | 160 | | | | **160** | 308.00 | **49280.00** |
| 10 | Intermediate Piece (I.P) With IP Leaded Bronxe bush (BWSSB SR 14-15 P-58 I-B2) | No. | 60 | | | | **60** | 715.00 | **42900.00** |
| 11 | Upper Flange **(BWSSB SR 14-15 P-59 I-C3)** | No. | 60 | | | | **60** | 330.00 | **19800.00** |
| 12 | Lower Housing **(BWSSB SR 14-15 P-59 I-C4)** | No. | 60 | | | | **60** | 539.00 | **32340.00** |
| 13 | Guide vane **(BWSSB SR 14-15 P-58 I-B5)** | No. | 110 | | | | **110** | 192.50 | **21175.00** |
| 14 | Impeller Shell moulded with aluminium Bronze) (BWSSB SR 14-15 P-58 I-B6) | No. | 60 | | | | **60** | 264.00 | **15840.00** |
| 15 | Discharge outlet (D.O) Bearing D.O Steel Bush **P. (BWSSB SR 14-15 P-58 I-B7)** | No. | 60 | | | | **60** | 522.50 | **31350.00** |
| 16 | Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) **(BWSSB SR 14-15 P-58 I-B10)** | No. | 45 | | | | **45** | 660.00 | **29700.00** |
| 17 | Pump Couping (Stainless Steel) (BWSSB SR 14-15 P-58 I-B12) | No. | 60 | | | | **60** | 341.00 | **20460.00** |
| 18 | Stud and Nuts (BWSSB SR 14-15 P-59 I-C8) | Each | 75 | | | | **75** | 88.00 | **6600.00** |
| 19 | Motor Base With Pin (BWSSB SR 14-15 P-59 I-C11) | Each | 45 | | | | **45** | 407.00 | **18315.00** |
| 20 | Starter (with one year Guarantee) **P No. 55 / I No. 10.3.3 PRED SR (2012-13)** | No. | 50 | | | | **50** | 5050.00 | **252500.00** |
| 1 | Rotor (with one year Guarantee) **P No. 55 / I No. 10.3.6) PRED SR (2012-13)** | No. | 45 | | | | **45** | 4700.00 | **211500.00** |
| | Carbon Housing **P. No. 56 / I No.10.3.12 PRED SR (2012-13)** | No. | 35 | | | | **35** | 475.00 | **16625.00** |

| Sl No | Description of item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 23 | Thrust bearing block assembly complete with Segment bearing pad.**P. No. 55 / I No.10.3.13 PRED SR (2012-13)** | No. | 60 | | | | **60** | 1150.00 | **69000.00** |
| 24 | Oil Seal **P. No. 54 / I No.10.2.3 PRED SR (2012-13)** | No. | 45 | | | | **45** | 125.00 | **5625.00** |
| 25 | Oil Seal Steel Bush **P. No. 54 / I No. 10.2.4 PRED SR (2012-13)** | No. | 45 | | | | **45** | 150.00 | **6750.00** |
| 26 | D.O Bearing P. No. 44 / I No. 10.2.7 PRED SR (2012-13) | No. | 45 | | | | **45** | 285.00 | **12825.00** |
| 27 | Steel Bush **P. No.55 / I No. 10.2.9 PRED SR (2012-13)** | No. | 250 | | | | **250** | 150.00 | **37500.00** |
| 28 | Allen Screw P. No.44 / I No. 10.2.9 RDPR SR (2012-13) | No. | 40 | | | | **40** | 25.00 | **1000.00** |
| 29 | Pump Key (Stainless Steel) P. No. 45 / I No. 10.2.11 RDED SR (2012-13) | No. | 45 | | | | **45** | 125.00 | **5625.00** |
| 30 | Non – return valve (NRV) assembly complete with rubber 'O' Ring **P. No. 55 / I No. 10.2.14 PRED SR (2012-13)** | No. | 30 | | | | **30** | 1350.00 | **40500.00** |
| 31 | Cable Guard **P. No. 55 / I No. 10.2.15 PRED SR (2012-13)** | No. | 45 | | | | **45** | 150.00 | **6750.00** |
| 32 | Strainer P. No. 45 / I No. 10.2.15 RDED SR (2012-13) | No. | 45 | | | | **45** | 150.00 | **6750.00** |
| 33 | Brass Filter **P. No. 55 / I No. 10.2.17 PRED SR (2012-13)** | No. | 45 | | | | **45** | 250.00 | **11250.00** |
| 34 | Labour Chargesw (Over Hauling Only) P. No. 45 / I No. 10.2.18 PRED SR (2012-13) | No. | 45 | | | | **45** | 556.00 | **25020.00** |
| 35 | Re-erection charges of pumping machineries including overhauling and pointing **P. No. 56 / I No. 10.3.20 PRED SR (2012-13)** | Each | 60 | | | | **60** | 950.00 | **57000.00** |
| 36 | Lock Ring P. No. 45 / I No. 10.3.11 PREC SR (2012-13) | Each | 50 | | | | **50** | 85.00 | **4250.00** |
| 37 | a) Carbon Housing P. No. 46 / I No. 10.3.12 APRDED SR (2012-13) | Each | 45 | | | | **45** | 475.00 | **21375.00** |
| 38 | Top Carbon/Ferrodo padding P. No. 46 / I No. 10.3.12 APRDED SR (2012-13) | Each | 45 | | | | **45** | 150.00 | **6750.00** |
| 39 | Bearing (Gunmetal) Centrifugal) Cast Aluminium Bronxe, Beaing bush P. No. 46 / I No. 10.3.16 APRDED SR (2012-13) | Each | 45 | | | | **45** | 400.00 | **18000.00** |
| 40 | Circillps P. No. 45 / I No. 10.3.17 PREC SR (2012-13) | Each | 45 | | | | **45** | 50.00 | **2250.00** |
| | | | | | | | | | |
| | **Genaral Itmes** | | | | | | | | |
| 41 | Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No. 32/I No 3b KPWD Electrical SR 2010-11** | No. | | | | | | | |

| Sl No | Description of item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | 63 Amps | | 5 | 3.00 | | | **15.00** | | |
| | | | | | | | **15.00** | 150.00 | **2250.00** |
| 42 | Threading of GI Pipes 50mm Dia P. No. 15 / I No.3.11.6 PRED SR (2012-13) | | 18X40 | | | | **720.00** | 25.00 | **18000.00** |
| | | | | | | | | | |
| 43 | Supplying of submersible pump cable 1X3X6..0 Sq.mm (Page No. XLVII, Sl NO. 8, PWD SR-2018-19 | Mtr | | | | | | | |
| | | | 1 | 500.00 | | | **500.00** | 144.00 | **72000.00** |
| 44 | Supplying and fixing MCB (P.NO - XLVII, SL.NO - 19, PWD SR 18-19) | No's | | | | | | | |
| | | | 10 | 1.00 | | | **10.00** | 900.00 | **9000.00** |
| 45 | Supplying and laying of L.T.U.G Cable having aluminiumconductor PVC insulated shethed galvanised steel wire/ steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable ( confirming to IS 1554) (P.NO - 553, I.NO - 10 (d), BWSSB SR 13-14) | Mtr | | | | | | | |
| | | | 1 | 150.00 | | | **150.00** | 169.95 | **25493.00** |
| | Basic Rate | 165.00 | | | | | | | |
| | 3% area weightage | 4.95 | | | | | | | |
| | Total | 169.95 | | | | | | | |
| 46 | Digging of trenches of 0.6mm x 0.50 Mtrs wide refilling the trench to the required ground level and consolidating etc,. Complete sutting road surfaces (P.NO - 554, I.NO - 12 (b), BWSSB SR 13-14) | Mtr | | | | | | | |
| | | | 1 | 150.00 | | | **150.00** | 56.65 | **8498.00** |
| | Basic Rate | 55 | | | | | | | |
| | 3% area weightage | 1.65 | | | | | | | |
| | Total | 56.65 | | | | | | | |
| 47 | Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (P.NO - 6, I.NO - 2.3, PWD SR 18-19) | Cum | | | | | | | |
| | | | 1 | 490.00 | 0.45 | 0.75 | 165.38 | | |
| | | | | | | | **165.38** | 316.94 | **52414.00** |
| | Basic Rate | 299.00 | | | | | | | |
| | Add 6% Area Weightage | 17.94 | | | | | | | |
| | | **316.94** | | | | | | | |

| Sl No | Description of item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 48 | Providing and installing at site of work 63mm (0.6[illegible] PVC Pipes of 6 kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete (P.NO - 96, I.NO - 13.73.2, PWD SR 18-19) | Mtr. | | | | | | | |
| | | | 1 | 490.00 | | | 490.00 | | |
| | | | | | | | **490.00** | 394.32 | **193217.00** |
| | Basic Rate | 372.00 | | | | | | | |
| | Add 6% Area Weightage | 22.32 | | | | | | | |
| | Total | **394.32** | | | | | | | |
| 49 | Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 7, I.NO - 2.11, PWD SR 18-19) | Cum | | | | | | | |
| | | | Qty. Vide Item No. | | | | **165.38** | 128.26 | **21211.00** |
| | Basic Rate | 121.00 | | | | | | | |
| | 6% area weightage | 7.26 | | | | | | | |
| | Total | 128.26 | | | | | | | |
| 50 | Supplying & delivery of brand 50mm Gate Valve. (PWD SR 18-19, P.NO.XLVII Sl.no, 15 | No's | | | | | | | |
| | | | 10 | | | | **10** | 1800.00 | **18000.00** |
| | | | | | | | | | |
| | Total of Other SR Items including GST Unit Rate Sl No. 1 to 42) | | | | | | | | **2025326.00** |
| | Total of PWD SR 2018-19 Items (SL no. 43 to 48) | | | | | | | | **399833.00** |
| 51 | 12% GST For PWD SR-18-19 Items only | | | | | | | | **47980.00** |
| 52 | For 1% PMC Charges | | | | | | | | **24252.00** |
| 53 | Miscellaneous and Unforeseen Charges | L/S | | | | | | | **2609.00** |
| | | | | | | | | **Total** | **2500000.00** |

**CERTIFICATE :**

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR 2018-19, PRED S.R. of Rural Engineering Department
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Sub Division
Bangalore-24

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

**Administrative Approval**
Accorded For RS 25:0 Lakhs only
Head of A/C.....
CER NO : 24 Dt: 28.09.2021

CE (YNK)

**Technical Sanction**
Accorded For RS 25:0 Lakhs only
Head of A/C.....
CER NO : 46 Dt: 28.09.2021

152 - BYATARAYANAPURA AC
WARD NO. 6- THANISANDRA

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Assistant Executive Engineer
Byatarayanapura Sub Division
B.B.M P Bangalore-560024